

THE LINK BETWEEN FISCAL PRESSURE AND DEVELOPMENT PREMISES FOR ROMANIAN COMPANIES

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Abstract

Romanian companies bore, during 2005 and 2011, the brunt of a fiscal policy, respectively a fiscal pressure whose final effects proved to be harmful to Romania's real economy, and, chiefly, to its development perspectives – particularly, of long term and coherent economic growth.

The results of planning and management with which Romanian state was worked up, quantifiable as far as their materialization in real economy, form a signal, respectively the component of a sound case of signaling the need to assimilate this lesson of the ever-present economic crisis: fiscal policy can be, and must be, used inclusively in a prospective mode.

Certain is just, even if quantified values of an index or other may, apparently, deny solidity of this picture (and assertion), the capability of Romanian fiscal system (possibly in the future, too) to work in a useful manner especially in the long term, if it will determine precisely its future (expected) revenues, in the framework of a coherent long term fiscal policy.

On the other hand, it is equally fundamental for fiscal policy to make it crystal clear for everyone how much will be collected from the companies, when this will happen, and, respectively, what they will make still good use of, and, first and foremost, that companies must be able, after taxation, to employ at least some of their (gross) revenues.

Key words: fiscal pressure, taxes, revenues, profit, budget

JEL Classification: H21, H25, O23

1. Introduction

Profit taxation, and, thus, impact of fiscal pressure on real economy is important, if not crucial, not only as far as supplying state budget with funds, but also from the point of view of the state the respective taxpayers confront with after taxation. In other words, we should know better, maybe, what will remain, and *where* will remain, in taxpayers' pockets, after taxation than *just* the amount of financial funds state benefits of as a result of profit taxation.

In an analysis of Romania's *statu-quo*, one can put forth, at least as a hypothesis, be it peremptory (by observing the 2012 state of Romanian real economy), the observation practical use of profit taxation, in the period between 2005 and 2012, was not the result of an optimal fiscal strategy – i.e. fiscal policy.

In fact, this hypothesis – or 'proposition' – is nowadays far from peremptory, at least because many an author stated it, in various papers and even in studies prepared by Romanian National Bank (most recent ones appeared in 2010 and 2011). As far as we are concerned, this is a sound hypothesis: we say 'sound' due to the fact we strive to attain this paper's objectives, as we consider, using the right tools.

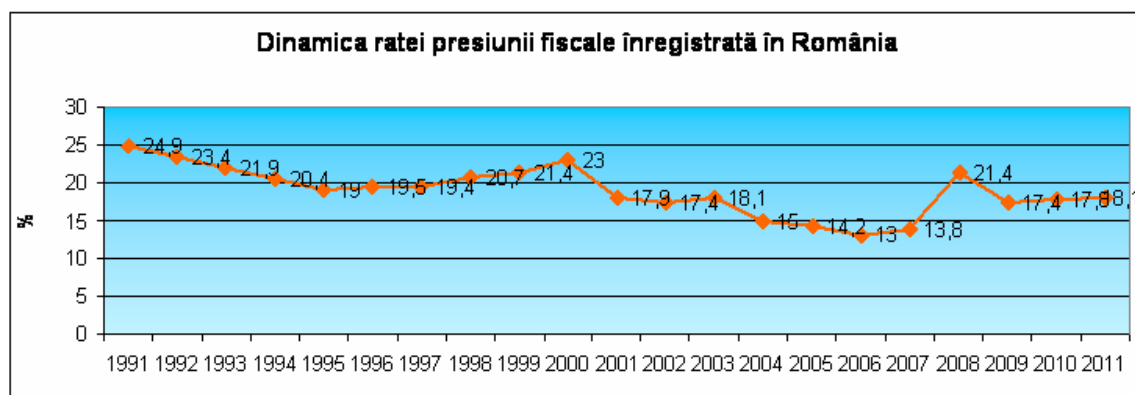
On one side, computing fiscal pressure ratio is a first, and surely indispensable, step. Further on, on the other side, in order to **compute** the impact of corporate income tax on Romanian companies (be them small firms or ‘true’ corporations), a reliable and verified more than once economic and mathematical model is, of course, most important – and, as we indeed understood, and understand, this, decision was to apply, in this paper, Martinez-Mongay (1997) model.

2. Content

And, if we measure properly variations – or the sudden and queer changes – of values of an index which quantifies the *impact* of fiscal pressure on firms, instead of the sheer value of fiscal pressure, we will be able, in fact, to estimate, quantitatively, final effects of this fiscal pressure, effects, as we shall demonstrate, damaging to real economy, in this time frame.

For this, firstly it is necessary to represent – as below these lines – graphically dynamics of global fiscal pressure rate, between 1991 and 2012 (fig. nr. 1) [7]:

Figure no 1. Fiscal pressure dynamics – Romania, 1991-2011



Source: Authors' computations

In this analysis, year of 2005 is square one, due to the fact this is the second year in which a decrease of the value of fiscal pressure was recorded, when comparing it with the value recorded in 2003 – 18.1%. From this we can reasonably deduce, as a reasonable presupposition, that, in this downward trend, fiscal system did not react, and could not have reacted – since such a need, for the entire Romanian economy, would have been at least less than palpable –, through a strong rise in firm-related fiscal pressure.

That is, we will hereinafter measure impact of fiscal pressure, for companies, starting from year 2005, in order to build, if possible, an ‘objective’ analysis: in 2005, comparing with maximum value for entire 1991-2012 period, e.g. with relative peak of 2003, fiscal pressure impact on taxpayers in general, and on companies in special, certainly dwindled.

3. Martinez-Mongay model – applied for economic and financial realities of Romania

To attain these aims we used Martinez-Mongay (1997) model, this of all models due to the fact from a structural point of view this model is better than any other one for its ability to highlight the structure of profit taxation dynamics, as this type of taxation is applied in Romania; and, therefore, for the time being, it is necessary to point out what Martinez-Mongay (1997) model has *not* in common with other models.

Value of index this model ultimately quantifies is quotient of a specific fraction: its numerator is, here, the amount paid as tax by a company – amount which is the result of a subtraction between income ‘produced’ by company as it used its capital *before* taxation and the same income *after* taxation.

As it goes, although this subtraction is, financially – i.e. economically – speaking, a proper deduction, in pure algebraic terms this is quite the contrary, that is a summation [5]:

- (1) Households’ payments owing on taxes levied on capital incomes, are all added up, plus
- (2) Companies’ payments owing on taxes levied on capital incomes, plus

- (3) Global households and companies’ payments owing on taxes on property plus, finally,
- (4) Payments owing on taxes levied on financial and capital transactions.

In the same time, the content of denominator of Martinez-Mongay model’ key fraction can also be computed as a sum, thus [4][5]:

- (1) Capital income before taxation, plus
- (2) Net operating surplus of the economy, plus
- (3) Wages and salaries, plus
- (4) Consumption of fixed capital, plus
- (5) Indirect taxes.

All computations comprised in Martinez-Mongay model use, as it is visibile at first hand, as *benchmark* income obtained by a company directly from its output mechanisms, more precisely from using its capital production factor – and whose value, at nation scale, is to be found in national accounts. In this point we must define that underlying concept: value of **gross operating surplus** is value of the financial extra generated by economic activities of a firm, after all wages and such were paid, value quantifiable after deductions for employees’ costs from gross added value produced by the firm. As a result, main component of gross operating surplus is firm’s profit, at which following elements are added:

- 1. Consumption of fixed capital;
- 2. Stakeholders’ revenues;
- 3. Business current transfer payments (net).

Final index of this model, that is *the* index this model computes – CORV – measure incomes (received by state authorities) on behalf of corporate income tax revenues – in this model, a percent of GDP (gross domestic product at market prices).

Martinez-Mongay Model computes, according to the principals stated above, finally, CORV indicator, using the following formula [4]:

$$CORV = DTRV \cdot TRCIR \quad (1)$$

Model uses also indexes that we can call intermediates, taking into consideration the fact that they are used for the calculus of the final index, namely:

$$\diamond DTRV = \frac{UTYG}{P.I.B.} \cdot 100 \quad (2)$$

❖ TRCIR = Tax revenues from corporate income taxes in percentage of total direct taxes,

$$TRCIR = \left[\frac{TRCI}{(TRII + TRCI + PROP)} \right] \cdot 100 \quad (3),$$

where:

- TRCI = Corporate tax revenues from income, profits and capital gains (national currency, current prices) = „1200”;
- TRII = Tax revenues from income, profits and capital gains of individuals (national currency, current prices) = „1100”;
- PROP = Taxes on property (national currency, current prices) = „4000”.

In the same model, concept (and indicator) “corporate income tax revenues” is a derivation of the concept (and index) “direct taxes”. In **ESA 1995** classification, this item is known as UTYG, containing:

- (A) on one side, component of taxes beared by the individuals/households and based on their incomes – including those who the firm can deduced, and containing the taxes supported by the firms owners;
- (B) on the other side, the component of paid taxes by the individuals and levied on the property.

Values obtained for these indexes, between 2005 and 2011, are comprised in the following table (table nr. 1) [7][8]:

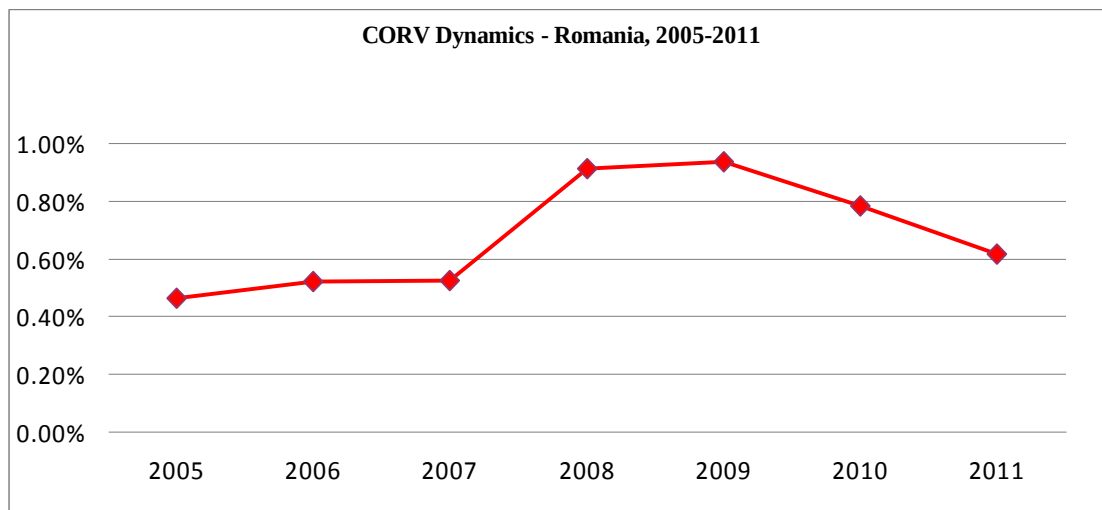
Table no 1. Martinez-Mongay model' results – Romania, 2005-2011

	million RON	million RON	million RON	million RON	million RON	million RON	million RON
Year	2005	2006	2007	2008	2009	2010	2011
1100	701,80	1.517,2	2.728,3	4.114,1	4.693,0	4.336,9	5.067,9
1200	6.724,40	9281,9	11.792,1	14.474,6	15.194,1	12.927,6	10.692,6
4000	1.978,20	2.515,0	3.200,1	4.769,8	4.733,3	7.395,9	7.527,7
UTYG	1.846,70	2551,5	3.246,0	7.534,6	7.576,0	7.772,1	7.727,0
PIB	288.176,10	344.650,60	416.006,80	514.700,00	501.139,40	522.561,10	578.551,90
DTRV	0,64%	0,74%	0,78%	1,46%	1,51%	1,49%	1,34%
TRCIR	71,50%	69,71%	66,55%	61,97%	61,71%	52,42%	45,91%
CORV	0,46%	0,516%	0,519%	0,907%	0,933%	0,780%	0,613%

Source: Authors' computations

Graphical representation of CORV dynamics issues the following outline (fig. no 2):

Figure no 2. CORV dynamics – Romania, 2005-2011



Source: Authors' computations

We analyze the results of this model, in fact the results of Romanian fiscal policy, that is the net state of the real economy after taxes deduction and, again, the *mathematics* of the model: to appreciate dynamics CORV we make use of an index frequently utilized for quantifying quantitative and qualitative dynamics (values) of an index, index known as *standard deviation*.

In order to compute value of standard deviation in our analysis, we apply the usual formula, namely (where p_i denotes probabilities of value R taking the value R_i , and $E(R_i) (= \bar{R})$ the mean value of all values R_i) [1][6]:

$$\sigma_{CORV} = \sqrt{\frac{\sum_i [R_i - E(R_i)]^2}{n}} = \sqrt{\frac{1}{n} \times \sum_i [R_i - E(R_i)]^2} \quad (4).$$

The resulted value is:

$$\sigma_{CORV} = 18,14430714.$$

All these numerical values allowed us to extract an important series of important conclusion concerning characterization of the dynamics here presented. Because is not important only the value of standard deviation, but also the order of the dates whose deviation – algebraically speaking – is measured by standard deviation.

We noticed, first of all, that, because the time period between 2005-2011 is relative restricted, all the values computed in index CORV is extremely rare, the value presented for standard deviation is, unavoidable, on large dimension.

It can be noticed from the graphic above that, ratio in G.D.P of the incomes from income taxes (in the large sense of the term) firms started to grow in the first three years, getting the maximum of the period at the beginning of the economic crisis- for Romania, respective, at the end of the economic growth period. After that the ratio failed, but not at the level from the beginning of the period – or even lower.

Otherwise, even in this preliminary analysis we can't notice a prospective fiscal policy (related with the firms), on the contrary, apparently - in both senses of the term – the frame of a fiscal policy built by their planers for uses the impulses that could be registered, but not for foresee them.

However, the causes for that value has observable dimensions are much complexes. Because, the computed values of the CORV index, are sensible, but simultaneously asymmetric, far from the area of medium reaction, adaptive to environment, to the fiscal system.

On the other hand, receiving fiscal incomes is not realized in an extensive way and in all directions (for an economy prepared for the economic crises means to observe the value, and the importance of every moment), in that conception fiscal authorities should, and would have been capable, *exempli gratia*, to decrease fiscal pressure in a better year, from economical point of view, for expending it a less favorable year, which made the contributors to be satisfied in both cases.

4. Conclusions

What persons in charge of preparing and implementing fiscal policy in Romania failed to comprehend, in this period, was the fact that, carrying on as they did, they did not allow to the average taxpayer to pay to state budget more **after** taxation than through it, resulting from larger investments in real economy, whose (positive) impact would have been, one may assume, more profound.

In conclusion, all these mathematic and economic rationales allow us to argue Martinez-Mongay model certifies the capability of Romanian fiscal system (possibly in the future, too) to work in a useful manner especially in the long term, *if* it will determine precisely its future (expected) revenues, in the framework of a coherent long term fiscal policy, so that it will be crystal clear for everyone how much will be collected *from* the companies, *when* this will happen, and, respectively, what they will make still good use of, and, first and foremost, that companies must be able, after taxation, to employ at least some of their (gross) revenues.

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